



# The Diggable Communities Collaborative

The power of partnership in strengthening community gardens in the Region of Waterloo

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## **Abstract**

Community gardens have been linked to multiple benefits such as improved human health, quality of life and environmental sustainability. Increasingly, community gardens and other forms of urban agriculture are being recognized for their ability to contribute to community food security. Community food security is attained when a community is able to meet its nutritional needs with safe and culturally appropriate foods while encouraging self-sufficiency and social equity. The Diggable Communities Collaborative (DCC) is a partnership in the Region of Waterloo that aims to strengthen existing community gardens and to create new ones. This study aims to explore how the inclusive partnership approach used by the DCC has contributed to the increased capacity of community gardens in the Region of Waterloo. Semi-structured interviews were conducted with past and present DCC participants to gain insight into how the process used by the partnership has been conducive to promoting community gardens in the Region of Waterloo. It was found that the inclusive partnership approach of the DCC is supportive of grassroots movements that are fundamental in promoting local food security. This collaborative is unique in that it has nurtured local grassroots movements without forcing any political agenda. The partnership approach in the DCC has allowed the region to overcome challenges often associated with community gardens, ensuring continued food security within the local community. The expansion of this inclusive partnership approach should be promoted in other regions to build capacity on local, national and international scales.

## **1.0 Introduction**

There has been an overwhelming call to shift towards a more sustainable food system in order to meet global food security requirements. While modern industrial agriculture has allowed substantial yield increases of several crops, it has done so at the expense of the ecological integrity of many ecosystems and with a heavy reliance on a dwindling supply of fossil fuels (Kirschenmann, 2010). With the prospect of climate change, an increasing global human population and decreased availability of energy, some have called for a restructuring of the food system rooted in the principles of sustainability and resilience (Kirschenmann, 2010). Such a system would be ecologically resilient, economically viable and socially equitable.

At the 1996 World Food Summit, it was decided that food security is attained when “all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (FAO, 1996). While food insecurity is prevalent in developing countries, it also exists in Canada, a country with a strong economy and plentiful natural resources. Rideout *et al.* (2007) suggest that the problems with Canada’s food system are rooted in the disconnect between food, nutrition, agriculture and trade policies. For example, while there is a plentiful supply of food, it is suggested that nutrition and health are a lesser concern (Rideout *et al.*, 2007). Furthermore, with much of the world’s population living in cities, there is an increasing disconnect between people and food production.

Feenstra (2002) discusses the local and global nature of the system, the barriers to meaningful participation, the possibilities of economic and community development within the food system, and the relevance and importance of policy. Herein, there are many possibilities for improvement within Canada that will be most effectively approached at a community level. The expansion of urban food production capacity through initiatives such as community gardens is one of the ways in which cities are working to create a local food supply (Nasr *et al.*, 2010). Community gardens have been identified as having multiple individual, social and environmental benefits (Okvat and Zautra, 2011) and should be encouraged and nurtured in urban areas.

The importance of local food production is gaining precedence with the prospect, and in some cases reality, of volatile food prices, peak oil and climate change (De Zeeuw and Dubbeling, 2009). There are also more meaningful reasons for which this movement is gaining precedence. There is an increasing recognition of the simple pleasure that comes from eating locally and sustainably grown food and the possibilities for increased community capacity through food availability (Feenstra, 2002). The advantages of community partnerships are increasingly being recognized as a valid way to promote systems change and to improve community health (Foster-Fishman *et al.*, 2001). Tidball and Krasny (2007) suggest that community gardens are social-ecological systems that contribute to a larger goal of fostering civic ecology in urban areas. They explain that civic ecology is predicated on the attainment of social-ecological resilience and requires the participation of NGOs, government departments and civil society. This approach seeks to nurture cultural and ecological diversity, create opportunities for meaningful participation and learning and to promote community development in a way that maximizes resiliency. To do this, it is important to incorporate different types of knowledge and perspective. This approach has been applied in many different efforts in community development, but the incorporation of such a system in community garden development is rare.

The Region of Waterloo has recognized the importance of community food system planning in relation to food security. In the most recent Regional Official Plan (2009) they assert their aim “to create a system in which all residents have access to, and can afford to buy, safe, nutritious, and culturally-acceptable food that has been produced in an environmentally sustainable way” (Xuereb and Desjardins, 2005: 4). Sustainability, in which community and environmental health, self-sufficiency, and collaboration are encouraged, is a core element of the Region’s vision for a healthy food system (Xuereb and Desjardins, 2005). More specifically, the Region has included community gardens as an important aspect of liveability within the area. It is stated that “area Municipalities will establish policies in their official plans that encourage community gardens and rooftop gardens” (Region of Waterloo, 2010: 3.F.3). Currently there are over 40 community gardens in the Region of Waterloo and this number is increasing. The expansion of community gardens in the Region of Waterloo can be attributed to the Diggable Communities Collaborative (DCC), a partnership that aims to promote, strengthen and create community gardens within the region. The DCC presents a unique opportunity to examine the

effectiveness of inclusive partnerships in promoting food security and community capacity. The objective of this study is to reflect upon the work that the DCC has done in relation to community gardens and to determine the effectiveness of their inclusive partnership approach in promoting local food security. The accomplishments of the DCC, indicate that their methods could be applied to foster increased capacity within other communities on a global scale. By examining the successes and challenges of the DCC in establishing community gardens, this paper aims to identify how to effectively form a partnership that is supportive of local needs and cultivates increased food security and community capacity.

### **1.1 Background: the Diggable Communities Collaborative**

In 2008, Region of Waterloo Public Health (RWPH), Opportunities Waterloo Region (OWR) and the Community Garden Council (CGC) of Waterloo Region came together to form the Diggable Communities Collaborative (DCC). The initiative was spearheaded by RWPH with the anticipation that a formal partnership approach with an organization like OWR would increase funding opportunities and that collaboration with volunteers from the CGC would increase the capabilities of supporting community gardens (RWPHRep1, 2011; RWPHRep2, 2011). Since that time the partnership has been especially devoted to improving the accessibility and inclusiveness of community gardens in the Region of Waterloo as well as nurturing a supportive community garden policy environment (Popovic, 2011). The reasons for involvement in this project are different for each organization. For example, RWPH is committed to building healthy supportive communities through physical activity and the availability of nutritious food options. OWR is an organization with charitable status that seeks to alleviate poverty within the Region of Waterloo. To apply for Ontario Trillium Foundation grants it is necessary to have a registered charity and OWR has acted as the administrative lead for the funding periods. This involves handling the funds, hiring staff, ensuring that initial proposals and objectives are being met and reporting on progress (OWRRep., 2011). The CGC of Waterloo Region is a group of volunteers dedicated to helping both community gardeners and community garden coordinators with their roles. The CGC is involved in many different activities such as matching people to gardens, providing compost delivery, community garden policy initiatives, fundraising and raising awareness about community gardens. Each partner recognizes the multiple benefits that community gardens can bring to the community and through the DCC has been involved in projects to enhance these benefits.

## **2.0 Research Methods**

This study was conducted using a qualitative methodological approach that involved a literature review and semi-structured interviews with past and present DCC participants. Qualitative researchers attempt to understand the social world from the perspective of the people they are studying and to gain a contextual understanding of social behaviour (Bryman *et al.*,

2009: 134). Through this approach, we sought to understand the context within which the research participants are operating. Through the literature review we evaluated and synthesized existing research according to the key concepts within the conceptual framework for this study. The concept of community food security underlies this study and the first section addresses this idea as discussed in the literature. Community gardens are central to this discussion, and the literature highlights the various social, community and environmental benefits that they can bring to participants and to communities. Collaborative partnerships, and their role in promoting systems change, are also considered in the literature review.

We selected seven members and past affiliates of the DCC and conducted semi-structured interviews with them in order to gain insight into the formation, accomplishments, challenges and approaches of the partnership to date as well as the ways in which it has contributed to increased capacity of community gardens in the Region of Waterloo. This approach was approved through the University of Waterloo Office of Research Ethics. A semi-structured interview approach gives the research participant some freedom to discuss what they perceive to be important based on their interpretation and to perhaps take the interview in a direction not anticipated by the researcher (Bryman *et al.*, 2009: 159). The goal was to encourage the participants to provide a narrative of their personal experiences and observations within the partnership in order gain insight into the collaborative processes used. Due to the time limitations of this study, a more comprehensive inclusion of DCC was not possible. We conducted interviews with the chair and a member of the CGC, with the Executive Director of OWR, and with two representatives from RWPH. We also included two participants who are no longer with the DCC, but who contributed significantly to the projects during their past involvement. We attempted to include the array of perspectives needed to provide an accurate representation of the partnership. Including participants who are not specifically affiliated with any of the partners, but who have insight into the processes used, is useful because it provides an unbiased view of the DCC. The transcribed interviews were then coded for thematic categories based on perceived partnership accomplishments in terms of community gardens and community capacity building, the importance of the partnership approach, and the barriers that the DCC faces. Finally, conclusions are drawn from the literature review and interviews.

### **3.0 Literature Review**

This section analyzes and summarizes the research that others have conducted based on the conceptual framework of community food security, community gardens and partnerships. Community food security and community gardens have been addressed in the literature, although research is lacking that relates these two concepts. The nature of collaborative partnerships has also been addressed in terms of how this approach can be used to promote systems change but not in relation to community food security and community gardens. Limited research has also

been done about community gardens and specifically the DCC in the Region of Waterloo; therefore, this study aims to contribute to this research.

### **3.1 Community Food Security**

Community food security is based on overcoming the challenges associated with the global food system. It is based on the recognition that food insecurity is most prevalent at the local level and that this can most effectively be addressed at this level (Hamm and Bellows, 2003). Community food security differs from food security in that it emphasizes the concern at a community-level (Kortright and Wakefield, 2010) rather than at a broader scale, such as national or global. Community food security is attained when “all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice” (Hamm and Bellows, 2003). Specifically, the focus of this approach emphasizes the importance of creating community infrastructure using a local food system approach (Hamm and Bellows, 2003). The term community is in itself a source of ambiguity, but in this case it is meant to encompass the Region of Waterloo with particular inclusion of the urban areas of Waterloo, Kitchener and Cambridge.

Building community food security is necessary because the severity of domestic hunger is deepening and achieving food and nutrition security is a significant challenge (McCullum, 2002). In the Region of Waterloo there are food security concerns associated with immigrants and there are issues with language barriers, low income and inadequate support systems (Burch-Fleming, 2008). Immigrants are more likely to be food insecure in Canada and prevention strategies must be used to overcome this discrepancy (Burch-Fleming, 2008). It is important to understand community food security because it addresses more than just the physical concerns pertaining to health. It also relates to mental and emotional health, poverty and hunger, and environmental and sustainability concerns associated with agricultural activities (McCullum, 2002). However, in order to build efficient community food security, an understanding of how interaction works within communities with available resources is necessary (Pellentier *et al.*, 2000).

#### **3.1.1 Issues raised in Canada**

Community food security is a concern for Canadians because it has been found that ethnic groups find it challenging to maintain nutritious diets (Kortright and Wakefield, 2010). This is possibly due to high amounts of immigrants in urban centres in Canada and their unfamiliarity with the surrounding area, not knowing the types of produce available for sale, or any grocery stores nearby (Kortright and Wakefield, 2010). The study by Desjardins *et al.* (2010) also notes that the nutritional requirements are not met by the agricultural practices in North America, and the production system does not prioritize nutritional requirements (Desjardins *et al.*, 2010). This study specifically shows that in 2004 more than half of Canadian adults did not meet the minimum requirement for daily servings of fruit and vegetables suggested by Canada’s

Food Guide (Desjardins *et al.*, 2010). As the study reveals, Canadians are not consuming enough fruit and vegetables and this can be at least partially addressed through the practice of community gardens through which people grow their own fresh produce. The study by Rideout *et al.* (2007) points out that food security in Canada is yet to be achieved. Approximately 15% of the Canadian population aged twelve and over has experienced food insecurity according to the 2000-2001 Canadian Community Health Reports (Rideout *et al.*, 2007). To overcome issues of access and supply to food, local governments need to take an active role in promoting a more equitable food system.

### **3.1.2 Towards a Healthy Food System in the Region of Waterloo**

Ultimately, the community food security approach is predicated on achieving tangible changes in the local policy environment and infrastructure (Hamm and Bellows, 2003). Community food security projects such as community gardens are said to require significant resources and this requires local political will and motivation (Hamm and Bellows, 2003). *Towards a Healthy Food System for Waterloo Region*, a discussion paper prepared by RWPH in support of the 2003 Regional Growth Management Strategy, recognizes the food insecurity issue in the Region of Waterloo. It is recognized that healthy communities are dependent on a healthy local food system. A sustainable, healthy food system benefits the local population in the community (Xuereb *et al.*, 2005). Higher food quality results from a diverse agricultural economy, and from a community that is closely linked with local food demand, but the Region of Waterloo is facing difficulty in meeting these standards (Xuereb *et al.*, 2005). As noted above, the population of the Region of Waterloo also does not meet the requirement of daily fruit and vegetable servings that have been recommended by Canada's Food Guide (Xuereb *et al.*, 2005). Approximately half of the low income families in this region experienced food insecurity problems in 2001 due to limited food access resulting from low incomes (Xuereb *et al.*, 2005). To overcome such problems, the Region of Waterloo has established objectives in relation to the food system. These objectives include ensuring that all residents can afford to buy the food needed for survival and health, and also to ensure that people have sufficient income to access healthy food items (Xuereb *et al.*, 2005). In addition, the region works to increase the availability of healthy food, making it easier for people to make healthy purchases (Xuereb *et al.*, 2005). Overall, the Region of Waterloo seeks to ensure that nutritious food options are available throughout the community with the help of increased urban agriculture programs (Xuereb *et al.*, 2005).

In order to attain community food security it is necessary to have a community food system that is sustainable, and that can improve the health of the community (McCullum *et al.*, 2005). This is because a sustainable community food system can bring collaborative effort in the community to build food systems that are locally based and also self-reliant (McCullum *et al.*, 2005). Several steps can be taken to build an efficient community food system. The first step is to educate consumers, organizations and institutions about the importance of locally grown

organic food and the benefits it can bring (McCullum *et al.*, 2005). Second is to spread out the food distribution activities and let more of the public spaces be in charge of this than private areas (McCullum *et al.*, 2005). Third is to ensure that everyone in the community has access to and income to purchase healthy and nutritious produce, and not just rely on charitable food items on a regular basis. In addition, it is important to ensure that locally-grown food production increases (McCullum *et al.*, 2005).

### **3.2 Community Gardens**

Urban agriculture brings many benefits to a community including a potential increase to food security through meeting the food demands of local people (Kortright and Wakefield, 2010). Community gardens are defined as plots used for growing food that are community-based and require collaborative efforts to produce food under the area that has been assigned as ‘Community Gardens’ (Okvat and Zautra, 2011). Community gardens arose during the late 1800s in response to economic related food shortages and continue to be used today to support sustainable food systems (Okvat and Zautra, 2011). Community gardens provide social, environmental, economic, and health benefits. Social benefits include greatly developed and expanded social networks within the community through active participation (Okvat and Zautra, 2011), and through knowledge transfer between participants of different generations and different ethnic groups (Lennon, 2010). In addition, studies have shown that attitudes of people toward their community and neighbourhood tend to increase through the practice of community gardening (Armstrong, 2000). Community gardens also provide environmental benefits such as the creation of habitats for animals, removal of air pollution in urban areas, reduction of runoff and climate change mitigation (Okvat and Zautra, 2011). The most apparent economic benefit comes from growing one’s own produce which can give great cost-saving benefits, resulting in savings of approximately \$250 per season per person (Lennon, 2010). Lastly, community gardens can be used as a tool to improve individual health by encouraging individuals to adopt a more nutritious diet (Okvat and Zautra, 2011). Armstrong (2000) found that people who have participated in community gardens tend to eat more fresh organic produce and have lower consumption of less nutritious food such as sweets.

Community gardens come with many benefits, but the literature acknowledges the additional research that is required to address potential benefits of these gardens (Armstrong, 2000). Furthermore, it is important to recognize the numerous challenges that are associated with establishing and maintaining community gardens in Canada’s urban areas. These activities require “leadership, land, funding, and participants” (Okvat and Zautra, 2011: 382); all of which can be difficult to come by. A significant challenge is to maintain continuous participation to raise community gardens because this is the main requirement (Henderson and Hartsfield, 2009). Another challenge that the past communities have faced were shortage of land and funding (Okvat and Zautra, 2011), but this can be overcome if municipalities can implement policies

about allocating resources to the community gardens (Henderson and Hartsfield, 2009). An interesting insight from Okvat and Zautra (2011) is that the fences, locks, close-knit groups and permitted hours associated with community gardens can be perceived as a source of exclusion from within the wider community. In his discussion of community gardens in New York City, Schmelzkopf (1996) discussed the idea of “garden politics” as a way of representing the power struggles and conflict over ethnicity, background and inclusion that he observed in the gardens. Care has to be taken so that certain individuals do not attempt to make the community garden their “private club” (Schmelzkopf, 1996). The long-term sustainability of gardens is another challenge (Okvat and Zautra, 2011) but this can be overcome as well if organizations can collaborate with others and form partnership to create solutions in more effective ways (Henderson and Hartsfield, 2009). Although community gardens are not being prioritized as much as they should be (Pothkichi, 1999), through government support, adequate funding, and awareness of community, these gardens are becoming more important fixtures within urban areas.

### **3.2.2 Community Gardens in the Region of Waterloo**

The idea of initiating and raising community gardens is starting to flourish in Canada and many municipalities are making efforts to increase local implementation (Michalenko, 2010). The Region of Waterloo has a promising future in developing well-established community gardens throughout the region and the start-up of community gardens dates back to as early as twenty-five years ago (Michalenko, 2010). The region has more than forty community gardens and envisions starting up more in the future (Michalenko, 2010). Many benefits of community gardens have been seen in the Region of Waterloo (Lennon, 2010). For example, community gardens have been shown to increase social interaction amongst various groups in the community and to provide a meeting space for immigrants (Lennon, 2010). It was also shown that the community gardens are a great source of education in that it is providing hands-on experience to many children, and it also provides opportunities for people to obtain physical exercise (Michalenko, 2010). However, the past research shows that although a majority of people in the region are interested in growing their own food, there is a lack of participation in raising community gardens (Lennon, 2010). This is largely due to the fact that about 25% of the Region of Waterloo population consists of immigrants and refugees who are not aware of community gardens or of how to participate (Lennon, 2010). There are other concerns as well, such as land acquisition, water supply and availability of fertile soil (Michalenko, 2010). The Region of Waterloo will need to work on overcoming such barriers in the near future in order to nurture a successful community gardening movement.

### **3.3 Collaborative Partnerships**

A partnership approach is used between organizations that share similar ideas and interests to achieve desired goals in the most efficient way (Foster-Fishman *et al.*, 2001). This approach is especially used in communities to raise awareness of certain programs, or simply to

be involved in developing and sustaining the community with various projects and programs (Roussos and Fawcett, 2000). Partnerships evolve for many reasons in communities. For example, in order to provide a particular service in communities or run certain activities it can be more effective when organizations combine to plan better activities (Weiss, 1999). In this way, both the organizations and partnerships, and participants are effectively benefitting from the event. In addition, collaboration among the groups tends to create synergy and this helps in minimizing the use of limited resources (Emshoff *et al.*, 2007). A partnership approach allows the process of sharing information, sharing power and decision making between all the organizations that are involved, and this approach is successful in identifying the gaps in services that were once provided by the individual group (Emshoff *et al.*, 2007).

A collaborative partnership works together with associated organizations to achieve a common goal and purpose (Roussos and Fawcett, 2000). Roussos and Fawcett (2000) suggest that “in public health, collaborative partnerships attempt to improve conditions and outcomes related to health and wellbeing of entire communities” (369). The partnership approach is increasingly being used to promote systems change; however, there is little existing knowledge on how effective and successful the approach is in enhancing community-level activities and outcomes (Roussos and Fawcett, 2000). There are also challenges associated with the partnership approach including sharing responsibilities among other people and possibly also sharing resources and risks at the same time. Conflicts can arise within and outside the partnership and it may be difficult to overcome these. Maintaining sufficient resources between organizations for a long period of time can be challenging (Roussos and Fawcett, 2000). In addition, adequate skills and knowledge are required to work together and collaborate to create effective programs (Foster-Fishman *et al.*, 2001). Individual partnerships must find ways to overcome these challenges as they evolve.

#### **4.0 The Diggable Communities Collaborative: Findings and Interpretation**

The Diggable Communities Collaborative (DCC) is dependent on a unique partnership between Region of Waterloo Public Health (RWPH), Opportunities Waterloo Region (OWR) and the Community Garden Council (CGC) of Waterloo Region. It is unique in that its members maintain an exceptional level of commitment and compassion towards community and community gardens that is rare in such a partnership. One interviewee indicated that the combination of a regional government, a charitable organization and a volunteer-driven council in a partnership would traditionally suffer because of the overbearing nature of government bodies; but the members of the DCC maintain a trust and fairness that is fundamental to their success. Another interviewee expressed that “an important component is the trust that developed between Public Health and Opportunities. It makes the work of the collaboration a lot easier when you know that your partner has the best interests of the project at heart” (OWRRep, 2011).

The research revealed that the partnership approach that directs many of the actions of the collaborative is not only dependent on the partnership between the three official DCC groups, but functions in combination with independent bodies that are brought in to aid in specific projects. For example, with funding from Together 4 Health (a healthy lifestyle promotion initiative) the DCC was able to involve students from Elmira District Secondary School to create signs for the community gardens. This particular project increased awareness and knowledge within the school and the signs promote public interest in the gardens. This ad hoc partnership approach ensures the continued advancement of the DCC towards achieving their goals for food security and increased garden and community capacity. The DCC is centered on a project-by-project basis because there are always opportunities to make new connections with groups that may have a particular knowledge or interest in varying projects.

One of the benefits of the interviews in this study is that they offer new insight into the DCC from the perspective of individuals who are, or were, directly involved in various projects. This provides an understanding of how the members of this partnership personally view their successes and the associated challenges they have faced. Most importantly, this has allowed for a deeper understanding of how their partnership approach has increased their resources and opportunities for changing the community. The interviews also demonstrate that the motivation to continue with the DCC not only exists, but is resolute, ensuring that community gardens will continue to thrive as key fixtures of the regional landscape.

#### **4.1 The Influence of Community Gardens**

The interviews conducted for this study are not only indicative of the commitment of the DCC, but demonstrate how effective this partnership has been in implementing and promoting community gardens throughout the Kitchener-Waterloo region. One truly commendable achievement of the DCC is their influence in expanding the number of community gardens in the region from twenty-five in 2009 to forty-three in 2011. This achievement is made even more admirable because of the additional improvements they have made to gardens to make them more culturally accessible. It was identified in the literature review that community gardens can be associated with problems of garden politics and inclusiveness, but the DCC is making the creation of exclusive community gardens one of its priorities. A partnership with the Council of Agencies Serving South Asians (CASSA) gave the DCC access to funding to promote culturally accessible gardens that reflected the desires of local immigrants and minority groups. They were also able to create posters and bookmarks, depicting the word “Garden” in differing languages. This undertaking saw the successful promotion and implementation of new gardens that allow community members to maintain ties to their culture through food and social interaction.

In combination with the School of Planning at the University of Waterloo, the DCC was also able to integrate new designs into community gardens to make them more physically accessible to those with limited mobility. With the assistance of over twenty student volunteers,

design charrettes were created for four community gardens to address the issue of access limitations. Such proposals included wider paths for wheelchair access or raised beds to prevent strenuous bending. This and the all-culture gardens project reflect how influential community gardens can be in fostering inclusiveness and social interaction, while also increasing food security and community capacity.

#### **4.1.1 Community Food Security through Community Gardens**

Ensuring the availability of safe and nutritious food in a community is a particular concern for the DCC. As previously indicated, the current social, economic and environmental climates are threatening local food systems and how people approach food consumption. Increased financial burden is leading to the consumption of processed and packaged meals because of their low prices and ease of access. Furthermore, the degradation of the world's fertile agricultural land places an even greater financial burden on communities because of the loss of precious soil reserves. The DCC recognizes their responsibility in increasing community food security, and they have approached it through the expansion and development of community gardens. This is how one research participant described the importance of community gardens: "the very simple reason is food security. It's a way for people who live on limited incomes to access affordable fresh produce" (OWRRep, 2011).

Community gardens offer an alternative means for procuring fresh and natural produce that is both inexpensive and nutritious. As stated by a representative from RWPH, "urban agriculture is a growing phenomenon and community gardens are one piece of that urban agriculture push" (RWPHRep1, 2011). By supplying this invaluable resource to community members, the DCC is aiding in the fulfillment of the dietary needs of individuals and families within the community by providing a new agricultural source. The DCC not only acts as a means for the development and maintenance of community gardens, but it is also a resource for those in need of information about introducing their own gardens to a community. For example, an interview revealed that members in a local community contacted a representative of the DCC about concerns regarding the availability of food within their area. They wanted to implement a community garden project that would increase their local food security. By contacting the DCC, this community was provided with connections to potential sources of land in their area and with the City of Kitchener so that they might access funding. Although the DCC's role in this appears minimal, it directed this community through the proper channels so that they might protect themselves from the threat of food insecurity.

The promotion and reinforcement that the DCC provides to community gardens, and the level of its expansion within the Region of Waterloo, can have positive correlations on food security within a community, but the interviews revealed that the DCC's influence is expanding across Ontario. Other cities, including Kingston, London, Peterborough and Sudbury have been in contact with the DCC to learn how to introduce community gardens within their regions as well. Brantford has been particularly involved in a new multicultural project in which the DCC is

assisting. Increasing the number of community gardens across Ontario will have a significant impact on the availability of healthy and nutritious food, reducing the stress of food insecurity on a community.

#### **4.1.2 Capacity Building**

The DCC has been dedicated to building capacity of community gardens since the collaboration was first formed. Funding from the Ontario Trillium Foundation allowed the DCC to begin a campaign to build community garden capacity. Through the funding, the DCC was able to hire a Community Garden Capacity Builder who was responsible for overseeing and analyzing all of the community gardens within the region. Through this project certain objectives were outlined that would promote community garden capacity within the region, including information kits and workshops, strengthening the CGC and increasing municipal cooperation in community garden development. They have made incredible progress in achieving their goals in education and promotion, and are continuing to work on policy development within cities that is supportive of community garden development. The policy development piece is indicative of the DCC's commitment to bring about lasting change within the community and this has been the leading role of the Community Garden Council. One research participant identified that the "systemic problems and issues at higher levels can be dealt with at lower levels" (Anonymous1, 2011) and it is with this idea that the DCC is influencing change at a broader scale.

One of the main concerns of the DCC is the building of community capacity, particularly in relation to health concerns within the Region of Waterloo. As stated by a representative from RWPH, "The basic tenant of community capacity building is that you work with community partners to identify health issues that are important to them. Health [is] not just your physical health, it's your mental health [as well]" (RWPHRep2, 2011). This statement epitomizes what community gardens stand for. They are not only a source of healthy food and physical activity, but they also create opportunities for social interaction and a personal connection with one's environment. By increasing the capacity of community gardens, the DCC can also indirectly contribute to community capacity building because of its links to food security and a healthy lifestyle.

#### **4.2 The Challenges of the Diggable Communities Collaborative**

In each interview it was asked what the associated challenges are with maintaining the partnership and how the DCC has approached these challenges. Communication was found to be one of the most challenging issues within the DCC, largely because they are committed to maintaining a democratic approach. In a collaborative it is required that all members are consulted before any final decisions are made. This was encountered early on by the partnership, as described by one of the participants:

“It was hard to move faster when we had to inform Council before taking certain steps. It was easier for Public Health and Opportunities to stay in touch because this is our job and we’re here 5 days a week. It’s more challenging to keep a volunteer group that meets once a month fully engaged in the decision making and aware of actions. However, this challenge was discussed, expectations were reviewed and adjustments were made to ensure that everyone was engaged as they should be. This was a learning experience for the Diggable partners” (OWRRep, 2011).

Following the expectations and mandates of all the different groups can result in a slower process. One interviewee described this as a “dance between the Community Garden Network’s mandate, Public Health’s mandates, Opportunities’ mandates, the Council’s mandate and the garden coordinators” because “everyone was still seeing [the issues] from their own lens and had their own priorities of what they wanted to see happen” (Anonymous2, 2011). It was noted that these challenges are being overcome as the partnership continually works together.

As this is a non-profit group, the DCC’s main source of funding comes from the Trillium Foundation. This is not a consistent source of funding and can therefore dictate the DCC’s periods of activity. Furthermore, it contributes to the greatest challenge that the DCC faces: limited resources. It is often assumed that because of the organizational level of the DCC there is a relatively abundant source of resources, but the reality is that they are very restricted. The DCC is not the only area of focus for the people involved, as many of them have additional jobs and responsibilities outside of the partnership. The limited funds can hinder the DCC’s ability to hire support staff to oversee the projects directly on a permanent, full-time basis, which was a suggested method for overcoming the resource challenges.

#### **4.2.1 Overcoming the Obstacles**

Despite the challenges that the DCC faces, it has still managed to lead the community towards a more sustainable and grassroots-oriented approach to food security and community gardens that is unsurpassed by any in Ontario. Its unique and dynamic approach to community garden development in the Region of Waterloo, and the project-by-project approach, has allowed for the steady and impressive increase and improvement of community gardens throughout the region. Unlike most government projects, it has not set itself unreasonable deadlines or project parameters. A representative from RWPH likened the activity of the collaborative to a peony in that it has periods of full bloom and periods of dormancy, explaining that “[The Collaborative] come[s] together to do things when they need to be done, but we don’t want to exist as an organization or an entity just for the sake of existing. We want to bloom when there’s something to be done” (RWPHRep2, 2011). This approach helps the collaborative to prioritize what is truly important to the community and the gardens because it does not exhaust its resources with unnecessary projects.

Fundamental to the success of this partnership is the maintenance and strengthening of trust between the different partners. It was expressed by many representatives that the trust that is shared within the collaborative has helped them overcome certain challenges in communication. Over time, the members have come to understand that the people involved are heartfelt in their desire to see the community gardens succeed. A representative from OWR stated, “Sometimes...circumstances dictate the need to make decisions fast without the other partner’s input, but if trust is present this poses no problem. All efforts are supported knowing that it is for the greater good” (OWRRep, 2011). This is nurtured by a collective understanding that everyone has the potential to offer something significant to the DCC and its projects.

The approach of the DCC is effective because the framework respects the opinions and inputs from the various partners, and the group strives to extend their gratitude to all those involved in the projects. The involvement of the different groups “broadens perspectives and opens your eyes to different possibilities that you might not have considered, keeps you open and brings up really innovative ideas” (Anonymous2, 2011). After the successful completion of a garden project they may hold celebratory launches to commend people on their contributions. In addition, the DCC is first and foremost a support system for the community. Projects are not driven by political agendas, but they are based on the needs of the people. It is supportive of a grassroots approach to community food security in that projects encourage and incorporate community involvement and opinions into their project strategies. This combination of grassroots and organizational involvement has resulted in a unique and successful approach toward community garden development and food security.

## **5.0 Discussion: The Power of Partnership**

The partnership approach taken by the DCC has afforded them opportunities that these groups would not have had otherwise. As Opportunities described it, “we would not have been able to develop and implement projects such as what has been accomplished by the Diggables by itself. The resources are just not there” (OWRRep, 2011). The accomplishments of the DCC in promoting and increasing community gardens in the Region of Waterloo has mainly depended on its ad hoc approach that has permitted the exchange of new ideas around numerous projects. As indicated in the research, the contributions from the independent partners have led to increased promotion, through the creation of community garden signs and multicultural posters that could only have been possible with connections made with the Elmira District Secondary School and the CASSA. In addition, the partnership with the CASSA gave the DCC an opportunity to increase food security within minority groups who might otherwise have difficulty with food purchases, as indicated by the literature. The contributions from the School of Planning students at the University of Waterloo aided the DCC in their mission to promote physically accessible gardens. In addition, the DCC’s contacts with other municipalities have increased the potential for greater food security throughout Ontario.

Most important to the success of the DCC is the continual support that the lead members provide to each other. RWPH provides the framework around health promotion and ensures that the health of the community remains a priority. The Healthy Eating and Active Communities Team of RWPH is dedicated to the DCC, and provides the educational resources to those seeking to create community gardens. For example, the knowledge provided by RWPH about community gardens has encouraged OWR to take a more active role in community garden activities, including the plans to establish a garden for senior citizens. Without OWR, the DCC would not have access to the Trillium Foundation funding that is central to its success. Furthermore, OWR provided the connection to CASSA and its funding for the all-culture gardens. It also provides a perspective on the issues of poverty, as its main focus is poverty alleviation, giving the group its humanistic framework. The CGC can be viewed as the grassroots framework for the DCC because it is open to any members of the garden, regardless of their skills. It gives community members the opportunity to take part in the various promotional and educational campaigns, thereby ensuring that the community gardens remain connected to the community.

This research has contributed to the understanding that food insecurity is not to be addressed globally, but is more effectively managed in a smaller context. Where it challenges this assumption is in the understanding that simple grassroots initiatives are the most effective means for achieving food security. The DCC represents a new dynamic approach towards food security that is not only supported by grassroots movements, but requires the collective work of like-minded individuals at various levels within the community. Furthermore, the DCC's continuing success demonstrates how a collaboration that is supported by equal opportunities and discussion for all interested parties within a community can promote community capacity building. The open exchange of ideas pertaining to health concerns has triggered the development of community gardens by the DCC as food security is an increasing issue in the Region of Waterloo. By acting as a support system for local community garden projects, the DCC does not force its own agenda on the grassroots movements of the public, but gives them the necessary tools and resources to foster their own garden development. This partnership approach, that incorporates various stakeholders from different backgrounds, allows for a more holistic interpretation of the needs of the community and more effective plans for increasing food security.

## **6.0 Research Limitations**

The concepts of community food security, community gardens and collaborative partnerships have been addressed as separate issues within the literature, but there is limited research available that addresses the three concepts collectively. There is literature that links food security with community gardens, but there is little research that addresses how to effectively achieve this through a partnership such as the DCC. Furthermore, there are no peer-reviewed articles that address the DCC and its accomplishments or the underlying framework of

the partnership. Therefore, our information on the DCC has been provided entirely through reports from the DCC and the interviews with the DCC affiliates. This limited the scope of our research to a few select and available people. In the future, it will be useful to do a comprehensive, critical analysis of the DCC to determine the accomplishments and complications from the perspective of the public.

## **7.0 Conclusion**

The Diggable Communities Collaborative, in partnership with other organizations in the Region of Waterloo, has strengthened existing community gardens and initiated the start-up of new ones in the region. Through their partnership approach, the DCC maximizes the benefits of community gardens and contributes to increased community food security in the Region of Waterloo. The partnership approach of the collaborative has provided them with increased opportunities for community garden development, accessibility, and awareness. The inclusive nature of the collaborative and its associated success is an indicator that such an approach may be effective in promoting food security on even greater scales. The most fundamental aspect of the collaborative is that it maintains a trust, respect and fairness that allows for open communication between people from all walks of life. Ensuring the flow of knowledge in implementing community gardens is predicted to have a long-term effect on global food security if it is properly implemented in other regions outside of Waterloo. The infrastructure that is provided by government organizations should only be there to support grassroots movements that center on the concerns of the community and should not address political agendas that promote poor allocation of resources. It is the recommendation of this research that the DCC partnership model be adapted to other areas to nurture global food security from the grassroots up.

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## **Appendix A: Introduction Letter**

University of Waterloo

**November, 2011**

To Whom It May Concern:

I am teaching a 4<sup>th</sup> year course at the University of Waterloo on Global Food Systems. Although there is much that students can learn from books and research articles, I believe that their learning experience can be significantly enhanced by listening to the ideas and experiences of people directly involved in various aspects of the food system. To supplement their classroom learning, the students in my class have signed up for various research projects related to developing a more sustainable food system. This assignment will involve conducting brief interviews or a survey. Through this work, students will learn how to develop a logical and focused set of questions and then obtain answers from someone working on the "front lines".

Based on the specific question they wish to address, students develop a detailed interview or survey questions. The interview or survey is not expected to take a large amount of your time (probably 10-30 minutes). However, you should feel free to end the interview at any time you choose. As well, you should not feel obligated to answer any question that you prefer not to and may indicate that you do not wish to respond to a question at any time.

For some projects, the students will audio record the interview, with the participant's permission. Please be assured that names of interviewees and their agencies will not be revealed in the students' reports *unless you expressly agree to this*. Notes, questionnaires, and/or audio recordings will be kept for one year in a secure location and then destroyed. With your permission, some students may also request permission to take digital images of activities related to their research projects. The students will be writing a brief summary of the information they have obtained from the research. If you would like to receive a copy of the report, please indicate this to the student and you will be forwarded one upon completion of the course.

Each project has been reviewed by, and received ethics clearance through, the Office of Research Ethics (ORE) at the University of Waterloo. Any comments or concerns resulting from your participation in the interview can be directed to Dr. Susan Sykes, ORE at 519-888-4567, Ext. 36005 or [ssykes@uwaterloo.ca](mailto:ssykes@uwaterloo.ca). Thank you for your willingness to share your perspectives and expertise and help students learn more about developing a sustainable food system. If you have further questions or concerns about the present research assignment, please feel free to contact me at 519-888-4567, Ext. 37012 or [sdscott@uwaterloo.ca](mailto:sdscott@uwaterloo.ca).

Sincerely,

Steffanie Scott

## **Appendix B: Interview Guide**

1. What is your role in relation to the Diggable Communities Collaborative and in what way have you personally been involved?
2. How did this Collaborative come about and how have you grown as a partnership?
3. What do you see as the Diggable Communities Collaborative's accomplishments to date? How does the partnership measure and evaluate this success? Have initial objectives been met?
4. What are the challenges that this partnership faces in terms of a) achieving objectives? and b) working collaboratively to reflect the goals of participants? How have you overcome some of these challenges?
5. How does the partnership ensure the democratic and inclusive conditions that are necessary for effective collaboration?
6. What are the long term goals of the Diggable Communities Collaborative? Do the resources and motivation exist to continue the partnership?
7. How has the collaborative nature of this partnership allowed the partners to achieve their goals?
8. Do you think that similar partnerships could be (and should be) adopted in other municipalities, or is this unique to the Region of Waterloo?